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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,824	04/18/2001	Glen Davis	DGL-10002/15	9644

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EXAMINER

WONG, STEVEN B

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 07/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/837,824

Applicant(s)

DAVIS, GLEN

Examiner

Steven Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

2. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Hand.

Regarding claim 1, Hand discloses a set of water skipping articles comprising a three dimensional body (45) defined by upper and lower elliptically extending faces (41, 42) and a hollow interior cavity (57).

Regarding claim 4, the interior cavity is formed by elliptical surfaces (49, 55).

Claim Rejections - 35 USC § 103

3. Claims 3, 5-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hand. It would have been obvious to one of ordinary skill in the art to form the width to form the skipping article of Hand with the instantly claimed dimensions as the applicant has not shown the criticality by a new and unexpected result and it appears that the dimensions shown by Hand would accomplish similar purposes.

4. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hand in view of Glovak et al. (4,151,997). Glovak et al. reveal a water skipping article formed from sand and a water soluble organic binder (column 1, lines 33-43). It would have been obvious to one of

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ordinary skill in the art to form the article of Hand from the materials of Glovak et al. in order to provide an environmentally friendly water skipping article.

Response to Arguments

5. Applicant's arguments filed May 24, 2002 have been fully considered but they are not persuasive. Regarding the applicant's argument that the surfaces of Hand are not elliptical in shape, it appears that applicant is using his own definition of the terminology. Attention is directed to the attached definition which states that an ellipse is defined as oval in shape. Clearly, Figures 2 and 5 of Hand show the water skipping article having surfaces with an oval cross section. Although Hand does not particularly state that the surfaces are elliptical, it does not preclude one of ordinary skill in the art from discerning from the Figures that the water skipping article is elliptical in cross section.

Regarding the enhanced performance characteristics obtained by the water skipping device of the present invention, the applicant has been invited to provide evidence of a new and unexpected result obtained from the particularly claimed dimensions.

Regarding the applicant's statement that Hand provides a pointed outer edge and not the claimed smooth edged outer perimeter, the applicant appears to be arguing a difference in degree which is not presented in the claims. While the rounded edge (45) of Hand might not be to the same degree as that of applicant's, the instant claims do not particularly define this degree and thus, the water skipping article anticipates the claimed limitation.

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Regarding the limitation for the article to be formed from a biodegradable material, attention is directed to the rejections of claims 2 and 9 wherein the reference to Glovak et al. teaches a water skipping article formed from a biodegradable material.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Wong whose telephone number is (703) 308-3135.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1148.

Official responses, subject to the provisions of 37 C.F.R. 1.6(d), can be faxed to (703) 305-3579.

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Unofficial faxes which are meant for discussion purposes only should be sent to (703) 308-7768. It is strongly suggested that the examiner be contacted directly before sending any unofficial fax.

~~Steven Wong~~
Primary Examiner
Art Unit 3711

SBW
July 18, 2002

el-e-vat-ed \ˌvāt-əd/ *adj* (1553) 1 a: raised esp. above the ground or other surface (an ~ highway) b: increased esp. abnormally (in ~ degree or amount) (~ blood pressure) 2 a: being morally or intellectually on a high plane (an ~ mind) b: FORMAL DIGNIFIED (~ diction) 3: exalted in mood or feeling
elevated railroad *n* (1868): an urban or interurban railroad operating chiefly on an elevated structure — called also *elevated railway*
el-e-vā-tion \ˌel-ə-ˈvā-shən/ *n* (14c) 1: the height to which something is elevated: as a: the angular distance of a celestial object above the horizon b: the degree to which a gun is aimed above the horizon c: the height above the level of the sea: ALTITUDE 2: a ballet dancer's or a skater's leap and seeming suspension in the air; also: the ability to achieve an elevation 3: an act or instance of elevating 4: something that is elevated: as a: an elevated place b: a swelling esp. on the skin 5: the quality or state of being elevated 6: a geometrical projection (as of a building) on a vertical plane *syn* see HEIGHT
el-e-vā-tor \ˌel-ə-ˈvā-tər/ *n* (15c) 1: one that raises or lifts something or up: as a: an endless belt or chain conveyor with cleats, scoops, or buckets for raising material b: a cage or platform and its hoisting machinery for conveying something to different levels c: a building 2: for elevating, storing, discharging, and sometimes processing grain 3: a movable auxiliary airfoil usu. attached to the tail plane of an airplane for producing motion up or down — *see* AIRPLANE illustration
el-e-vēn \ˌi-ˈlev-ən/ *n* [ME *enleven*, fr. *enleven*, adj., fr. OE *endleofan*, fr. *end-* (akin to OE *ān* one) + *-leofan*; perh. akin to OE *lēon* to lend — more at ONE-LOAN] (bef. 12c) 1 — *see* NUMBER table 2: the 11th in a more or series 3: something having 11 units or members; esp.: a football team — **eleven adj or pron** — **el-e-vēn-th** \-ən(ə)th/ *adj or n*
eleven-plus \i-ˈlev-ən-ˈplʌs/ *n*, *Brit* (1937): an examination taken between the ages of 11 and 12 that determines the type of secondary education to which a student is assigned
el-ev-en-s-es \-ən-zəz/ *n pl* but sometimes *sing* in constr [irreg. pl. of *eleven* (c1500)] *Brit* (ca. 1819): light refreshment (as a snack) taken in the middle of the morning
eleventh hour *n* (1826): the latest possible time (won his reprieve at the ~)

el-e-von \ˌel-ə-ˈvən/ *n* [elevator + aileron] (1944): an airplane control surface that combines the functions of elevator and aileron
elf \elf/ *n*, *pl* elves \ˈelvz/ [ME, fr. OE *elf*; akin to ON *alfr* elf & prob. to L *albus* white — more at ALB] (bef. 12c) 1: a small often mischievous fairy 2 a: a small lively creature; esp.: a mischievous child *adj* b: a usu. lively mischievous or malicious person — **elf-ish** \ˈel-ɪʃ/ *adj* — **elf-ish-ly** *adv*
elf-in \ˌel-ˈfən/ *adj* [irreg. fr. *elf*] (1596) 1 a: of, relating to, or produced by an elf b: resembling an elf 2: having an otherworldly or magical quality or charm
elf-lock \ˌel-ˈflək/ *n* (1592): hair matted as if by elves — *usu.* used in pl.
el-i-hi \ˈel-ˈhi/ *adj* [elementary (school) + high (school)] (1948): of, relating to, or designed for use in grades 1 to 12
Eli \ˈe-li/ *n* [Heb *ʿĒlī*] a: a judge and priest of Israel who according to the account in 1 Samuel was entrusted with the care of the boy Samuel
Eli-as \ˈi-li-əs/ *n* [LL, fr. Gk *Elías*, fr. Heb *ʿĒlīyāh*]: ELIAH
el-ic-it \i-ˈlis-ət/ *v* [L *elicitus*, pp. of *elicere*, fr. *e-* + *lacere* to allure — more at DELIGHT] (1605) 1 a: to draw forth or bring out (something latent or potential) b: to derive (as a truth) by logical processes 2: to call forth or draw out (a response or reaction) *syn* see EDUCE
el-ic-i-ta-tion \i-ˈlis-ə-ˈtā-shən, -ē- / *n* — **el-ic-i-tor** \i-ˈlis-ət-ər/ *n*
el-ide \i-ˈlīd/ *v* **el-ided**; **el-iding** [L *elidere* to strike out, fr. *e-* + *laedere* to injure by striking] (1796) 1 a: to suppress or alter (as a vowel or syllable) by elision b: to strike out (as a written word or passage) 2 a: to leave out of consideration: OMIT b: CURTAIL, ABRIDGE
el-i-gi-ble \ˌel-ə-ˈjə-bəl/ *adj* [ME, fr. MF & LL, MF, fr. L *eligibilis*, fr. L *eligere* to choose — more at ELECT] (15c) 1 a: qualified to be chosen: ENTITLED (~ for sophomore standing) (~ to retire) b: permitted under football rules to catch a forward pass (an ~ receiver) 2: worthy of being chosen: DESIRABLE (an ~ young bachelor) — **el-i-gi-bil-ity** \ˌel-ə-ˈjə-bil-ə-ti/ *n* — **el-i-gi-ble** *n* — **el-i-gi-bly** \ˌel-ə-ˈjə-bli/ *adv*
Eli-jah \i-ˈlɪ-ə/ *n* [Heb *ʿĒlīyāh*] a: a Hebrew prophet of the 9th century B.C. who according to the account in 1 Kings championed the worship of Jehovah as against Baal
el-imi-na-tion \ˌel-ɪ-mə-ˈnā-ti- / *n* -**nat-ed**; -**nat-ing** [L *eliminatio*, pp. of *eliminare*, fr. *e-* + *limin-*, *limen* threshold — more at LIMB] (1568) 1 a: to cast out or get rid of: REMOVE, ERADICATE (the need to ~ poverty) b: to set aside as unimportant: IGNORE 2: to expel (as waste) from the living body 3: to cause to disappear by combining two or more equations — **el-imi-na-tion** \ˌel-ɪ-mə-ˈnā-shən/ *n* — **el-imi-na-tive** \ˌel-ɪ-mə-ˈnā-ti-v/ *adj* — **el-imi-na-tor** \ˌel-ɪ-mə-ˈnā-tər/ *n*
Eli-sha \i-ˈlɪ-ʃə/ *n* [Heb *ʿĒlīshā*] a: a Hebrew prophet and disciple and successor of Elijah
el-ision \i-ˈlɪ-zh-ən/ *n* [LL *elision-*, *eliso*, fr. L *elisis*, pp. of *elidere*] (1581) 1 a: the use of a speech form that lacks a final or initial sound which a variant speech form has (the use of *i* instead of *is* in *there's* is an example of ~) b: the omission of an unstressed vowel or syllable in a verse to achieve a uniform metrical pattern 2: the act or an instance of omitting something: OMISSION
élite \ˈlā-ˈtē, -i- / *n* [F *élite*, fr. OF *eslite*, fr. fem. of *eslit*, pp. of *espire* to choose, fr. L *eligere*] (1823) 1 a: the choice part or segment; esp.: a socially superior group b: a powerful minority group (a power ~ inside the government) 2: a typewriter type providing 12 characters to the linear inch — **élite adj**
elit-ism \ˌel-ɪt-iz-əm/ *n* (1947) 1 a: leadership or rule by an elite b: belief in or advocacy of such elitism 2: consciousness of being or belonging to an elite — **elit-ist** \ˌel-ɪt-ist/ *n* *adj*
elix-ir \i-ˈlɪk-sər/ *n* [ME, fr. ML, fr. Ar *al-iksīr* the elixir, fr. *al* the + *iksīr* elixir, prob. fr. Gk *xerion* desiccative powder, fr. *xeros* dry — more at SERENE] (14c) 1 a: a substance held capable of changing base metals into gold: PHILOSOPHERS STONE b (1): a substance held capable of prolonging life indefinitely (2): CURE-ALL (3): a sweetened liquid usu. containing alcohol that is used as a vehicle for medicinal agents 2: the essential principle
Eliz-a-be-than \i-ˈlɪz-ə-ˈbe-θən/ *adj* (1817): of, relating to, or characteristic of Elizabeth I of England or her age — **Elizabethan** *n*
elk \elk/ *n*, *pl* elks [ME, prob. fr. OE *eolh*; akin to OHG *elaho* elk, Gk *elaphos* deer] (bef. 12c) 1 *pl* *usu* elk a: the largest existing deer

(Alces alces) of Europe and Asia resembling but not so large as moose of No. America b : a No. American deer (*Cervus canadensis*) similar to the red deer of Europe and related forms — called also elk c : any of various large Asian deer 2 : soft tanned rugged leather cap [Benevolent and Protective Order of Elks] : a member of a benevolent and fraternal order
elk-hound /'ɛlk-,haʊnd/, 'ɛl-,kaʊnd/ n (1835): NORWEGIAN ELKHOUND
ell /'ɛl/ n [ME *eln*, fr. OE; akin to OHG *elina* ell. l. *ulna* elbow]
Gk *elenē* ellen, Skt *ānī* ākinin, thigh] (bef. 12c) 1 : a forearm or arm 2 : any of various units used in measuring length
English unit of length (as for cloth) equal to 45 inches 2 : any of several units of length similar in use to the English ell
ℓ ell n [alter. of 'ell] (1773) 1 : an extension at right angles to the surface of a building 2 : an elbow in a pipe or conduit
ellag-ic acid /ˌɛlə-'jɪk-, e-/ n [*F. ellagique*, fr. *ellag.* anagram of *Gallia*] (1810) : a crystalline phenolic compound C₁₆H₁₀O₉ with two lactone groupings that is obtained esp. from oak galls and some tannins and is used medicinally as a hemostatic
ellipse /'ɛl-lips-, e-/ n [Gk *ellipseis*] (1753) 1 a : OVAL b : a closed plane curve generated by a point moving in such a way that the sums of its distances from two fixed points is a constant : a plane section of a right circular cone that is a closed curve 2 ELLIPSSIS
ellip-sis /'ɛl-lip-səs-, e-/ n, pl el-lip-ses /-səz/ [L. fr. Gk *ellipseis ellipse*, fr. *eileipein* to leave out, fall short, fr. *en-in* + *leipein* to leave more at IN, LOAN] (1540) 1 a : the omission of one or more words that are obviously understood but that must be supplied to make a construction grammatically complete ("the man that he sees" may be changed by ~ to "the man he sees") b : a leap or sudden passage without logical connectives from one topic to another c : marks or a mark (as ... or *** or →) indicating an omission (as of words) or a pause
el-lip-soid /'ɛl-lip-,soɪd-, e-/ n (1721) : a surface all plane sections of which are ellipses or circles — ellipsoid or el-lip-soi-dal /-lip-,soɪ-'dal/
adj
el-lip-tic /'ɛl-lip-,tik-, e-/ or el-lip-tical /-ti-kəl/ *adj* [Gk *elleiptikos* elliptive, marked by ellipse, fr. *ellipsein*] (1656) 1 : of, relating to, or shaped like an ellipse 2 a : of, relating to, or marked by extreme eccentricity b (1) : of, relating to, or marked by extreme eccentricity speech or writing (2) : of or relating to deliberate obscurity literary or conversational style — el-lip-tical-ly /-ti-k(ə)-lē-ad/ *adv*
el-lip-tic-i-ty /'ɛl-lip-'tis-it-(e), (-ə)/ n (1753) : deviation of an ellipse from the form of a circle or a sphere
elm /'ɛlm/ n [ME, fr. OE; akin to OHG *elme* Elm, L. *ulmus*] (11c) 1 : any of a genus (*Ulmus*) of the family Ulmaceae, the elm comprising large graceful trees with alternate stipulate leaves and apetalous flowers 2 : the wood of an elm
elm bark beetle n (1909) : either of two beetles that are vectors of fungus causing Dutch elm disease: a : a beetle (*Hylurgopinus ruficornis*) native to eastern No. America b : a European beetle (*Scolytus striatus*) that is established in eastern No. America
elm leaf beetle n (1881) : a small orange-yellow black-striped beetle (*Pyranthra ulmi*) that causes damage to young elms in eastern No. America as a larva and as an adult
El Niño /'ɛl-nən-yō/n [Sp., lit., the child] (1925) : an irregular rising flow of unusually warm surface water along the western coast of South America that is accompanied by abnormally high rainfall over land areas and that prevents upwelling of nutrient-rich cold deep waters causing a decline in the regional fish population
elo-eucio /'ɛl-o-'kyū-shən/ n [ME *elocucioun*, fr. L. *elocutio*-onis, fr. *elocutus*, pp. of *eloqui*] (15c) 1 : the art of effective public speaking 2 : a type of speaking esp. in public — elo-cution-ary /-shə-'rɪ-/ *n*
elo-euc-ion-is-t /-sh(-ə)n-ist/ n
elo-dea /'ɛl-əd-e-/ n [NL, fr. Gk *helodēs* marshy, fr. *helos* marsh, *Skt saras* pond, ca. 1868] : any of a small American genus (*Najas*) of submerged aquatic monocoelotyledonous herbs
elope /'ɛloɪn/ v [ME *eloynen*, fr. MF *espoigner*, fr. OF, fr. es-loire + loing (adv.) far, fr. L. longus, fr. longus long] (1500)
to take (oneself) far away 2 archaic : to remove to a distant place known place: CONCEAL
elong-gate /'ɛl-ŋg-,gat-ed/ vb -gat-ed; -gat-ing [LL *elongatus*, pp. of *elongare*, fr. L. e- + longus] vt (1578) : to extend the length of ; to grow in length
elongate or elong-gat-ed /ad- (1828) 1 : stretched out 2 : SLENDER
elon-gation /'ɛl-ŋg-,gä-shən/ n (14c) 1 a : the angular distance between two celestial bodies from one around which it revolves or from a point in the sky b : the daily extreme east or west position with reference to the north celestial pole 2 a : the state of being elongated or lengthened; also : the process of growing or increasing in length b : something that is elongated
elope /'ɛl-op/ vi eloped; eloping [AF *aloper*] (1628) 1 a : to run away secretly from one's husband with a lover b : to run away secretly without intention of getting married usu. without parental consent
away : ESCAPE — elope-ment /'ɛl-op-mənt/ n — eloper n
elo-quence /'ɛl-a-kwənts-/ n (14c) 1 : discourse marked by persuasiveness; also : the art or power of using such discourses effectively 2 : quality of forceful or persuasive expressiveness
elo-quent /'kwənt/ *adj* [ME, fr. MF, fr. L. *eloquens*, *eloquen-*tes, *eloqui* to speak out, fr. e- + loqui to speak] (14c) 1 : markedly expressive or revealing (an ~ preacher) 2 : vividly colorful and fluent expression (an ~ manner) — elo-quent-ly /-kent-le/ *adv*
else /'els/ adv [ME *elles*, fr. OE; akin to L. *alius* other, a different time (how ~ could he have acted) here and there b : in an additional manner or place or at an additional time (he was gold found) 2 : if not : OTHERWISE (leave or ~ you'll lose your job) used absolutely to express a threat (do what I tell you or ~ else where /-hweər/) b : being in addition (what ~ did he do?)
elsewhere /-hweər/ *adv* [ME *elwesher*, fr. *hwær*] (bef. 12c) : in or to another place (took his bus)

